

IN THE CLAIMS

1 1. (currently amended) An imprint template for imprint lithography that
2 comprises:

3 alignment marks embedded in an embedding material included in bulk
4 material of the imprint template, wherein the embedding material surrounds the
5 alignment marks.

1 2. (original) The imprint template of claim 1 wherein one or more of the
2 alignment marks are spaced one or more predetermined distances from a surface of
3 the imprint template.

1 3. (original) The imprint template of claim 1 wherein the one or more
2 predetermined distances is sufficient to enable predetermined radiation to irradiate
3 predetermined regions disposed under a surface of the imprint template.

1 4. (currently amended) The imprint template of claim 1 wherein the alignment
2 marks are fabricated from a material whose index of refraction is different from that
3 of at least the ~~bulk~~ embedding material of the imprint template surrounding the
4 ~~alignment marks.~~

1 5. (currently amended) The imprint template of claim 1 wherein the alignment
2 marks are fabricated from a material whose index of refraction is different from that
3 of at least the ~~bulk~~ embedding material ~~of the imprint template surrounding the~~
4 ~~alignment marks~~ and that of a material into which an imprint is made.

1 6. (original) The imprint template of claim 1 wherein the alignment marks are
2 metal.

1 7. (currently amended) The imprint template of claim 1 wherein a material
2 disposed between the alignments marks and a surface of the imprint template is the
3 same material as the embedding material and is the same material used to form other
4 portions of the bulk material of the imprint template.

1 8. (original) The imprint template of claim 1 wherein the surface of the imprint
2 template includes a release layer.

1 9. (original) The imprint template of claim 8 wherein the release layer is a
2 fluorocarbon release layer.

1 10. (original) The imprint template of claim 8 wherein the release layer is a
2 covalently bonded, thin, fluorocarbon film.

1 11. (currently amended) An imprint template for imprint lithography that
2 comprises:

3 alignment marks embedded in an embedding material included in bulk
4 material of the imprint template, wherein said embedding material surrounds said
5 alignment marks, with said bulk material being transparent to radiation having a
6 predetermined wavelength and said alignment marks being ~~are~~ spaced one or more
7 predetermined distances from a surface of the imprint template.

1 12. (original) The imprint template of claim 11 wherein the one or more
2 predetermined distances is sufficient to enable said radiation to irradiate
3 predetermined regions in superimposition with the imprint template.

1 13. (currently amended) The imprint template of claim 12 wherein the alignment
2 marks are fabricated from a material whose index of refraction is different from that
3 of at least the ~~bulk embedding material of the imprint template surrounding the~~
4 ~~alignment marks~~.

1 14. (original) The imprint template of claim 13 wherein the index of refraction of
2 the material differs from an index of refraction a layer into which an imprint is made.

1 15. (original) The imprint template of claim 14 wherein the alignment marks are
2 metal.

1 16. (original) The imprint template of claim 15 wherein the surface of the imprint
2 template includes a release layer.

1 17. (original) The imprint template of claim 16 wherein the release layer is a
2 fluorocarbon release layer.

1 18. (original) The imprint template of claim 16 wherein the release layer is a
2 covalently bonded, thin, fluorocarbon film.

1 19. (currently amended) A method for fabricating an imprint template for imprint
2 lithography that comprises steps of: depositing a mask on an imprint template;
3 etching alignment features through the mask into the imprint template;
4 depositing alignment marks into the alignment features;
5 ~~depositing a material over~~ covering the alignment marks with a same material
6 used to fabricate the imprint template; and
7 removing the mask.

1 20. (currently amended) The method of claim ~~12~~ 19 which further comprises
2 treating the surface of the imprint template.